

**CALFED Bay-Delta Program Project Information Form
Watershed Program - Full Proposal Cover Sheet**

Attach to the cover of full proposal. All applicants must fill out this Information Form for their proposal. Failure to answer these questions and include them with the application will result in the application being considered nonresponsive and not considered for funding.

1. Full Proposal Title: Upper Guadalupe River Tributary Monitoring Program & Pilot Restoration Project Proposal
Concept Proposal Title/Number: Upper Guadalupe River Tributary Monitoring & Pilot Restoration Project Proposal, WSP01-0019
Applicant: Guadalupe Coyote Resource Conservation District (GCRCD)
Applicant Name: Lawrence M. Johmann
Applicant Mailing Address: 40 Redding Road , Campbell, CA 95008
Applicant Telephone: (408) 742-3348 Applicant Fax: (408) 993-8728 Applicant Email: lawrence.johmann@lmco.com or ljohmann@yahoo.com
Fiscal Agent Name (if different from above): (GCRCD)
Fiscal Agent Mailing Address: 888 North First Street RM 204 San Jose, CA 95112-6314
Fiscal Agent Telephone: (408) 288-5888 Fiscal Agent Fax: (408) 993-8728 Fiscal Agent Email: gcrd@pacbell.net

2. Type of Project: Indicate the primary topic for which you are applying (check only one)

| | |
|--|--|
| <input type="checkbox"/> Assessment | <input checked="" type="checkbox"/> Monitoring |
| <input type="checkbox"/> Capacity Building | <input type="checkbox"/> Outreach |
| <input type="checkbox"/> Education | <input type="checkbox"/> Planning |
| <input type="checkbox"/> Implementation | <input type="checkbox"/> Research |

3. Type of Applicant: Resource Conservation District

| | |
|--|---|
| <input type="checkbox"/> Academic Institution/University | <input type="checkbox"/> Non-Profit |
| <input type="checkbox"/> Federal Agency | <input type="checkbox"/> Private party |
| <input type="checkbox"/> Joint Venture | <input type="checkbox"/> State Agency |
| <input checked="" type="checkbox"/> Local Government | <input type="checkbox"/> Tribe or Tribal Government |

4. Location (including County): Upper Guadalupe River Tributaries, Santa Clara County, CA

What major watershed is the project primarily located in:

☐ Klamath River (Coast and Cascade Ranges)
☐ Sacramento River (Coast, Cascade and Sierra Ranges)
☐ San Joaquin River (Coast and Sierra Ranges)
☒ Bay-Delta (Coast and Sierra Ranges)
☐ Southern CA (Coast and Sierra Ranges)
☐ Tulare Basin (Coast, Sierra and Tehachapi Ranges)

5. Amount of funding requested: \$ 47,000.00

Cost share/in-kind partners? ☒ Yes ☐ No

Identify partners and amount contributed by each:

BASIC \$ 4,000
GCRCD \$ 10,000

6. Have you received funding from CALFED before? ____Yes __X__No

If yes, identify project title and source of funds:

By signing below, the applicant declares the following:

1. The truthfulness of all representations in their proposal
2. The individual signing this form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or an organization)
3. The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the Watershed Program Proposal Solicitation Package and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent provided in the Proposal Solicitation Package.

Lawrence M. Johmann_PE, CQE, CRE, CPM_____

Printed name of applicant

Signature of applicant

UPPER GUADALUPE RIVER TRIBUTARY MONITORING PROGRAM AND PILOT RESTORATION PROJECT PROPOSAL

1. PROJECT DESCRIPTION

The objectives of the project are to develop and implement a comprehensive stream characteristics baseline and monitoring program on approximately 12 upper Guadalupe River tributaries. Then using the data collected in the monitoring program, select and develop a pilot restoration proposal for a section of one of the degraded channels.

The program will consist of four major phases: Phase 1 will establish approximately twelve permanent reference/monitoring sites along upper Guadalupe River tributaries. Reference sites will be established near selected operating gage stations in undisturbed stream reaches, if at all possible, and monitoring sites will be established at selected degraded sections of a stream. The permanent sites will then facilitate continuous assessment efforts; Phase 2 will consist of monitoring all of the established sites. Monitoring will consist of an annual re-surveying of each site and regular monitoring of flow conditions at each site, especially during storm periods. Students and volunteer community personnel will be recruited to perform the monitoring work. It will also consist of validating the collected data, data organization and management; Phase 3 will primarily consist of efforts by the Bay Area Shared Information Consortium (BASIC) to enhance the data collection effort and then to enter the data into a computer data base. BASIC has GIS and GPS equipment and expertise that will facilitate the pinpointing of monitoring sites in a computer database. They also have the ability to tie in photos and sketches with the numerical data collected to provide a consolidated digital data package. They will provide meaningful data displays linked to the monitoring sites that will be easily accessible by the public via the world wide web. It is anticipated that Phases 1, 2 and 3 will have a fair amount of overlap. Phase 4 of the project will consist of selecting one of the monitoring sites and designing a pilot restoration project for that site. It will also consist of developing a proposal to implement the design. The proposed pilot restoration site will only be selected after at least a year's worth of monitoring data have been collected. Community and agency input will be actively sought in the selection of the pilot restoration site.

Although the exact location of the reference/monitoring sites have not been selected as yet, the most probable locations will be close to functioning gage stations on Guadalupe Creek along Hicks Road, Alamitos Creek near Greystone Road, Calero Creek and Ross Creek. Probable monitoring sites would be located on Hicks, Shannon and Pheasant Creeks which are tributaries to the middle Guadalupe Creek; Randol, Greystone and Golf Creeks which are tributaries to Alamitos Creek; and Santa Teresa Creek which is a tributary to Calero Creek. An additional or alternate reference/monitoring site could be located near the gage station on Canoas Creek. Reference the attached maps for a general location of the proposed reference/monitoring sites. It is anticipated that all of the project sites will be located on public land/stream beds, on streams flowing through land owned by the Santa Clara Valley Water District (SCVWD) or through land where the SCVWD has an established right of way. Prior to pinpointing the location of each site, property rights will be verified. The Guadalupe Coyote Resource Conservation District (GCRCD) has maintained a blanket permit for accessing SCVWD property since 1994 for the purposes of monitoring and data collection.

The permit lapsed a few months ago and is currently being renewed but may not be available in time to be submitted with this Grant proposal. At worst case, it should be available within two weeks after the grant proposal submittal is due. In the event that a desirable monitoring site is found to be on private property, the owner's permission will be sought to establish the site and perform the necessary monitoring. If permission is not granted, then an alternate site will be selected. The selection of the exact location of the reference/monitoring sites will be accomplished after more research and planning have been accomplished. Research and planning will be the first activity conducted during Phase 1 of the project.

The upper Guadalupe River tributaries flow out of the Santa Cruz Mountains/Santa Teresa Hills in the southwestern part of the Santa Clara Basin Watershed. The River flows northward into the southern end of San Francisco Bay via Alviso Slough. The Guadalupe River and its tributaries once supported relatively large runs of salmonids but their numbers have declined over the years. Some tributaries still support rainbow trout but the lower watershed is now severely degraded due to flood control projects, water diversions, development, pollution, erosion and ill advised land use practices. The Santa Clara Watershed is identified by the EPA and USGS as the "Coyote Watershed, USGS Cataloging Unit #18050003. The EPA lists the watershed as seriously impaired.

Underlying Assumptions

It is assumed that much of the data this project proposes to collect does not exist, or if it does exist, it is not being shared with the public. The GCRCD has requested stream characteristics data many times in the past during the process of reviewing and trying to evaluate impacts of large multi million dollar flood control projects in the lower Guadalupe River watershed, as well as in other adjacent watersheds. It has been unsuccessful in obtaining any characteristics data. The Santa Clara Valley Watershed Management Initiative has requested copies of watershed data from all stakeholders and none of the stakeholders have offered up stream characteristics data or reported the availability or probable location of such data.

Expected Outcomes

Permanent reference site data are useful in many different contexts, they can support both local management decisions and broad research efforts. The baseline established is a foundation for a broad range of physical, chemical and biological monitoring techniques. Potential uses for reference site data include:

- Monitoring trends in fluvial and geomorphic condition over time.
- Quantifying environmental impact
- Assessing stream and watershed response to land use and management.
- Providing channel flow facts for aquatic species and flood protection
- Supporting resource inventories (habitat, water quality, vegetation).
- Tracking cumulative effects for entire drainage areas.
- Allowing valid comparisons based on stream type.
- Contributing to regional, national and international databases.

Data obtained from established reference sites will be used to generate “area hydrologic curves” which can then be used to support watershed assessment efforts, restoration proposals and designs for disturbed and degraded areas of the waterway. Data obtained from monitoring sites in disturbed reaches will provide important information as to the degree of disturbance and the need for remedy. They will also be useful to the Santa Clara Basin Watershed Management Initiatives (WMI) Watershed Assessment effort and the efforts of other environmental and educational groups.

Timetable for Completion

It is expected that detailed planning for the first three phases of the proposed project can take place in July. If the project is approved, reference and monitoring sites will be established in the August through October time frame. Monitoring will commence once the reference/monitoring sites are established and will continue throughout the year. Flow data will be collected on a frequent basis, especially during storm periods. As data are collected they will be reviewed by the monitoring team lead and then validated by the project manager before being released to the public. It is anticipated that characteristics and early flow data will start becoming available to the public during the first quarter of 2002. The reference/monitoring sites will be re-surveyed after the first year but flow data collection will be continuous until at least July 2003. After that time more funding will probably be required. After the first full year’s worth of data are collected, a process will begin to select a pilot restoration site. By the end of 2002 it is anticipated that a pilot restoration site will be identified and a preliminary design can be generated for that site. This design will then be submitted for peer and agency review and comment and modified if necessary. A proposal will then be developed to implement the design. It is expected this proposal can be completed by July 2003.

General Methodology/Process

The first stages of the project will be to formally plan the assessment activities and select the exact location of the reference/monitoring sites. Volunteer student/community monitoring teams will be established and trained during the initial stages of the project. Once the reference/monitoring sites are selected field survey work can commence. It is anticipated that numerous community volunteers and students will participate in this survey work. This will slow down the process but will provide educational experience for those involved. Once the sites have been selected they will be mapped, and at least one cross section will be taken of the channel and monuments will be set. Cross section measurements will include width, and depth of present channel, thalweg, bankfull channel, flood plain and flood prone area dimensions. In most cases, multiple cross sections will be taken in riffle and pool areas at reference sites along with longitudinal profiles. Other channel features will also be measured, including channel and bank material and current flows. Flow height markers will also be erected at each site to facilitate continuous monitoring. The procedures used for establishing the permanent reference/monitoring sites, as well as for defining the characteristics measured at each site and the continuous monitoring process will be based on protocols established by Thomas Dunne and Dr. Luna Leopold. They are defined in the publication Stream Channel Reference Sites: An Illustrated Guide to Field Techniques; General Technical Report RM-245, published by the US Forest Service.

2. QUALIFICATIONS & READINESS TO IMPLEMENT PROJECT

The Principal Investigator/Project Manager has over 30 years experience in the electronics and aerospace industry in the fields of quality and systems engineering. He is a California registered professional quality engineer, a fellow member of the American Society for Quality, an ASQ certified quality and reliability engineer and an Institute of Certified Professional Managers certified professional manager. He has served the Guadalupe Coyote (formally the Evergreen) Resource Conservation District at the Director and Associate Director level since 1994, serving several years as VP and President and spearheaded their river and salmonid preservation and restoration efforts. He presently represents the GCRCD and Western Waters Canoe Club on the Core Group and Watershed Assessment subgroup of the Santa Clara Basin Watershed Management Initiative and is serving as the Guadalupe sub-watershed assessment team co-captain. He has attended several river restoration seminars including one given in San Jose by Dr. Ann Riley and has completed Dave Rosgen's complete series of Applied Fluvial Geomorphology, design, monitoring and restoration classes. He has consulted with Dave Rosgen & Dr. Luna Leopold on problems and possible restoration solutions for the Guadalupe River system. He has also consulted with Dr. John Calaprice and the Round Valley Water District on the design/construction of a demonstration restoration project on Turner Creek in Round Valley, Covelo CA that was completed in October 2000. He is presently involved with the planning and design of two additional demonstration projects on Mill Creek in Round Valley that will be constructed this year. Turner creek is a tributary to Mill Creek and Mill Creek is a tributary to the Middle Fork of the Eel River. Mr. Johmann is ready to lead and manage the proposed project as soon as funding becomes available.

a. Level of Institutional Structure

The Guadalupe Coyote Resource Conservation District (GCRCD) will be the fiscal agent for the proposed project. RCD's are government entities authorized by the US Congress and set up by the State legislature to provide resource conservation services. The GCRCD has a five-member elected/appointed Board of Directors and a number of Associated Directors. All serve without pay and all are well-qualified professionals. Dr. Michelle Geary is the current Board President. A portion of property taxes collected within the district primarily funds the GCRCD. Although the GCRCD retains an accounting firm to manage its books, the District's funds are actually handled by Santa Clara County. The GCRCD's Board of Directors make all financial decisions and are responsible planning and managing the budget. The District also maintains a part time paid staff. The Board is currently evaluating the need for increased staff hours or obtaining additional help. The Board of Directors has committed to providing assistance in the management of the proposed project as in kind service. If funded, this will require additional staff hours.

b. Technical Support Available

The only technical support that is anticipated for Phases 1, 2 & 3 of the program is GIS/GPS and computer systems support which will be provided by BASIC. In addition to mapping the reference/monitoring site locations, plans are to enter the locations of these sites into a GIS system so that they can be pinpointed on the web. BASIC will provide the technical support and equipment to fulfill this function. It is not anticipated that additional technical support

would be required for the first three phases of the proposed project. However, if technical advice were needed it could be obtained from a variety of sources; Laurel Collins, Dr. Ann Riley or Bill Annable whom the RCD has worked with in the past or even personnel in the SCVWD or SCBWMI.

For Phase 3 of the program, BASIC will also provide the service of placing data on a publicly accessible web site and any technical assistance relative to this process. For phase 4 of the project, development of the pilot project design, technical assistance, if needed, will be sought from Bill Annable, Ann Riley, Dave Rosgen, or Luna Leopold.

c. Previous Projects

The GCRCDD or its partners have never instituted a monitoring project of this type and magnitude before. However, the PI/PM for this project has participated in field data collection, evaluation and project design in Dave Rosgen's series of classes and in the pilot projects he is involved with in Round Valley. BASIC has participated or lead a number of projects which resulted in data being collected and subsequently placed on their web site, Ref. <http://www.basic.org>.

The GCRCDD instituted and conducted a comprehensive water temperature-monitoring project on the Guadalupe River and several of its tributaries and on Coyote Creek in 1994. The PI/PM for this project led this effort on the Guadalupe River from 1995 until December 2000 when it was terminated. Temperatures were recorded every hour at up to 16 sites on the river system using Onset Computer data loggers that were also serviced by the PI/PM. The temperature-monitoring project was funded completely by the GCRCDD.

3. BUDGET INFORMATION

Reference budget cost sheets for a breakdown of project costs. Note the costs for Phase 1 of the project (Task 2) establishing the reference and monitoring sites are broken down into five sub-tasks: a) detailed planning, b) pre-project classroom training, c) performing the site surveys and establishing the reference/monitoring sites which will also include field training, d) performing re-survey of the sites in July 2002, and e) performing re-survey of the sites in July 2003. It is estimated that sub-tasks a) and b) will cost approximately \$1,920 (4 hr x \$40/hr x 12 sites). Sub-task c) is estimated to cost approximately \$7,680 (16 hr x \$40/hr x 12 sites). Sub-tasks d) and e) are expected to cost approximately \$3,840 each (8 hr x \$40/hr x 12 sites). Expendable items are estimated to cost approximately \$ 2,000 and travel about \$ 720. Phase 2 of the project (Task 3) is broken down into four sub tasks: a) generation of monitoring procedures, b) training, c) monitoring supervision & data verification, and d) data organization, archiving and management. Sub-task a) is estimated to cost approximately \$1,600 (40 hr x \$40/hr), sub-task b) about \$1,200 (30 hr. x 40/hr), sub-task c) approximately \$1,600 (40 hr x \$40/hr) and sub-task d) about \$7,600 (120 hr/yr x \$20/hr x 2 yrs). Travel and meeting are estimated at \$800. Further breakdown of costs for Phase 3 (Task 4) is provided in the BASIC letter attached. Phase 4 (Task 5) is broken down into six sub-tasks; a) data evaluation, b) site selection, c) restoration project design, d) peer review, e) design modification, f) develop proposal package. Cost breakdown for this task is as follows: a) b) & c) \$4,800 (80 hrs x \$60/hr), d) & e) \$1,800 (30 hrs x \$60/hr), f) \$2,400 (40 hrs x \$60/hr), travel and meetings \$400.

There are a number of expenses involved in the various phases of the proposed project, which are not specifically identified in the budget. For example, in project Phases 1 and 4 (Tasks 2 & 5), equipment such a laser level, current flow meter, survey rod, tapes and other measuring and marking equipment will be utilized. The expense of using this equipment is factored into the labor rates. Expendable items such as staff markers, rebar stakes, bank pins etc. are identified as material in the budget. Supplies normally associated with administrative work such as office supplies, computers, etc. is either factored into the labor rates or will be covered by the GCRCD or BASIC as part of their in-kind contribution to the project. GCRCD personnel, working part time will perform all of the engineering work, so they will not be covered by benefits but will be cover by District insurance. It is felt that the labor rates quoted in this proposal are substantially lower than those charged by consulting firms and the difference could also be considered as an in-kind contribution by the GCRCD.

4. TECHNICAL FEASIBILITY

- a. It is believed that there have not been any similar projects in the Santa Clara Basin. Probably the most comprehensive measurement project that has taken place to date in the Basin has been in conjunction with the lower Guadalupe Creek restoration project. While some flow data for this reach has been published in the project's EIR and reference is made to stream characteristics data, this data has not been made available to date.

Although it is believed that similar monitoring projects have not been conducted in the Santa Clara Basin, they have been widely conducted in other locations. Dr. Luna Leopold and Dave Rosgen are strong advocates of the collection of field data. The Stream Channel Reference Sites: An Illustrated Guide to Field Technique, which this project will use as a guide for establishing reference/monitoring sites and for the data collection was developed expressly for the purpose of providing guidelines for establishing permanent reference sites and gathering data about streams by the USDA Forest Service. The manual was developed with the assistance of the top fluvial geomorphologists in the country, Dave Rosgen, Thomas Dunne, Dr. Luna Leopold and Dr. William Emmett and is widely used for stream studies.

- b. While the proposed project does not offer a new approach, it does entail a new approach for stream studies in the Santa Clara Basin and will provide stream data that currently does not exist. The educational component of the project will provide student and community volunteers with and better understanding of how streams function, the importance of protecting those functions, the importance of performing field measurements and for following established procedures. It should also demonstrate the need making wise land use decisions. The design of the proposed pilot restoration project will also not offer a new approach to restoration but will definitely introduce a new approach in the Santa Clara Basin. It will use fluvial geomorphic concepts based on field measured data, collected at the project site and nearby reference sites. It will use the low cost design methods and propose the low cost construction methods advocated by Dave Rosgen. It will hopefully demonstrate that relatively low cost restoration projects are possible in the Santa Clara Basin area and that this will eventually lead to public demand for the implementation of a pilot project.
- c. It is hoped that once the reference/monitoring sites are established and a monitoring program is started that the program will continue past the initial two-year period. It is also hoped that the program will be so successful that it will be expanded to other sub watersheds. If the monitoring program is continued or expanded additional funding will be required. No additional funding is expected to be required for the proposed project since volunteers will be performing most monitoring efforts. In the event that projected budgets are endangered of being exceeded most volunteer help will be sought or the GCRCDD will cover the expense as in-kind contribution. Additional funding will be required if the proposed pilot demonstration project is deemed worthy of implementation. Then, the proposal would need to be finalized, and the restoration project would need to be formally approved and funded.

5. PROJECT EFFECTIVENESS

- a. Since the proposed project is primarily one of establishing reference/monitoring sites and then collecting data from those sites, data collection and monitoring are essentially the heart of the program. It will be extremely important for data to be collected in the same manner and with the same high attention to detail. This will be stressed in the volunteer/student educational program. The use of the Stream Channel Reference Site Guide by all involved with the project will provide a common method for establishing sites and performing the monitoring. In addition, simplified procedures for volunteer/student monitoring will also be generated as necessary, as well as procedures for handling the data once they have been collected.
- b. Data collected by the proposed project will be very useful for the Santa Clara Basin Watershed Management Initiative's (SCBWMI) Guadalupe Watershed assessment effort. Hopefully the process will be adopted and expanded to cover the entire river system as well as to other sub watersheds in the Basin as the proper assessment of the watershed will be extremely difficult without critical stream characteristics data. The Santa Clara Valley Toxics Coalition also expressed interest in participating in the proposed project, as did the local chapter of the Urban Creeks Council. Unfortunately, time limitations have prevented us from exploring the possibility of their participation at this time but this possibility is most welcomed and it will be actively pursued.
- c. The project proposes to use students from at least one college, Evergreen Community College, (Ref. letter of support from the college) to assist in the establishment of the reference/monitoring sites and perform some of the monitoring work. It also proposes to use community volunteers and high school students to perform monitoring work.
- d. The monitoring protocols that will be used are as defined in Stream Channel Reference Sites: An Illustrated Guide to Field Technique, General Technical Report RM-245 published by the USDA Forest Service. These protocols were developed by the top hydrologists and fluvial geomorphologists in the country, are endorsed by the USGS and are summarized in the USDA Forest Service's publication for the express purpose of stream monitoring, so they are believed to be very widely accepted as standard protocols.
- e. The data, which are collected, will facilitate the SCBWMI's assessment of the upper Guadalupe sub-watershed. The assessment will eventually need to consider impacts to all of the applicable beneficial uses of watershed waters as defined in the San Francisco Basin Quality Plan, although for the initial assessment effort, only four uses considered to be critical indicator uses will be evaluated. Data collected from this project will also be extremely useful for land use planning and for establishing flood protection policies/measures. Data obtained from monitoring sites in disturbed reaches will provide important information as to the degree of disturbance and the need for remedy, what type and size sediment is being moved by the system and at what flow levels. Data obtained from established reference sites will be used to generate "area hydrologic curves" which can then be used to support watershed assessment efforts, restoration proposals and designs for disturbed and degraded areas of the waterway. The Santa Clara Valley Toxics Coalition and their Clean Streams/Clean Bay program has indicated their interest in participating in the project and obtaining data gathered by the project.

6. Scientific Basis for Watershed Conservation/Maintenance/Restoration Actions

- a. The proposed project will collect data to enable the proper assessment of stream and hydrologic conditions and subsequently the entire watershed. Similar projects have been conducted in many other locations throughout the country but there have been no projects of a similar nature, as far as is known, in Santa Clara Basin. It is a well known and well documented fact that watershed conservation and stream restoration improves water quality and improves beneficial uses. The only scientific way to improve conditions is to measure existing conditions in order to establish a baseline. Only then can the results of improvement goals, policy changes or project activities be quantitatively measured and tracked by continued monitoring program.
- b. This project's goals and objectives were established as a result of consultations with Dave Rosgen and Dr. Luna Leopold. They both stressed the need for gathering field data on area streams as a basis for any watershed assessment, stream restoration or flood reduction effort. Mr. Rosgen stresses the importance of measured field data in his series of Fluvial Geomorphology, River Monitoring, Design and Restoration classes, and requires that students perform stream characteristics measurements and data collection field work in all of his classes.
- c. There were no scientific assumptions used to develop project goals. Project goals were established as a result of teachings and consultations with top experts in the field who have developed, tested and refined the techniques and protocols which will be used for the project. It is believed that they are widely accepted in the science and watershed communities since they are endorsed by the USGS and USDA.
- d. There have been no known projects of similar nature in the Santa Clara Basin. It is believed that the proposed actions are consistent with the scientific community's fluvial geomorphologic approach of waterway protection and restoration. The proposed project, however, is probably not consistent with the traditional way projects have been done in the Basin.
- e. The baseline knowledge used to support the proposed project concepts was the knowledge acquired by Dave Rosgen and Dr. Luna Leopold and passed along to the project PI/PM. Data collected by the proposed project will certainly result in more robust baseline knowledge since much of the data that are slated to be collected by the project currently do not exist.

7. A. How will the Project Address Multiple CALFED Objectives?

The proposed project is primarily a stream characteristics documentation and monitoring program. It is critically important to document and monitor streams in a watershed and to build a valid database in order to develop a program or propose a project to improve any aspect of the stream's function or beneficial use. It is only through field measurement and the establishment of baseline data that changes which result from management activities or a project's implementation can be tracked and evaluated. All four elements of concern; Ecosystem Quality, Water Supply, Water Quality and even Levee System Integrity can be either positively affected or negatively impacted by management practices or a project. Therefore, baseline data are critical so that the results of such activities can be measured and tracked.

The design of a pilot restoration project using data collected as a result of the stream characteristics and monitoring phases of the project will show how stream ecosystem quality, water system quality, water supply and even levee system integrity can be substantially improved for far less cost than traditional projects.

B. How Will the Proposal Define & Illustrate Relationships Between Processes?

In order to properly manage a watershed it is necessary to have valid data on which decisions can be based on. The proposed project will provide some of those data. It will provide channel flow and capacity data, and the relationship between storm events and runoff will be tracked. In addition, information on the types of sediment in the channel and if and how it is being transported, as well as whether the channel is stable or unstable will be recorded. Over time, the project should be able to provide information as to the affects of land use or other human related activities in the watershed. For example, once a permanent monitoring site and baseline is established, changes to the baseline can be measured and the causes for the observed changes can be investigated and hopefully identified. Development or removal of riparian areas normally causes increased flash runoff, which can lead to erosion, poor water quality or flooding downstream. With an established baseline, departures from the norm can be measured. Baselines are also just as important in degraded channels as departures from the baseline can be measured to identify the exact nature and extent of the problems as well as the effectiveness of any measures implemented to correct or mitigate the problems.

C. Identify a Lead Agency for Environmental Compliance.

The Guadalupe Coyote Resource Conservation District will act as the lead agency for environmental compliance. It is felt that the proposed project will qualify for Categorical Exemption as a Class 6 project under Section 15306, Article 19, Chapter 3, Title 14 of the California Code of Regulations per Section 21084 of the Public Resources Code. Since the proposed project is strictly a measurement and monitoring effort that will be undertaken largely in altered and degraded streams there is little chance that the project could have a negative environmental impact.

8. OTHER IMPORTANT ASPECTS OF THE PROGRAM

This proposed project is widely supported by the area groups and agencies, most of which belong to the Santa Clara Basin Watershed Management Initiative (WMI) . A copy of the WMI's letter of support, along with letters of support from other groups is being provided under separate cover.

In addition to the groups providing letters of support, the Silicon Valley Toxics Coalition has indicated they would support the project and referenced a number of other groups that may be interested in becoming involved, including Pioneer High School, Oak Grove High School and the Environmental Justice Water Coalition. Ref. attached e-mail. The GCRCD will pursue making contact with these groups and they will be invited to participate if the project is funded.

Please note a copy of this proposal is being provided to the Santa Clara Valley Water District as required as they are the local agency having jurisdiction over land use for the watershed of the proposed project.

CALFED WATERSHED PROGRAM BUDGET AND PROJECT SUMMARY II

| Task Description | | Completion date | Match funds | CALFED funds | Total |
|---|--|-----------------|-------------|--------------|-------------|
| Task 1: | Administration: | Jul-03 | \$6,000.00 | \$0.00 | \$6,000.00 |
| | <i>Task 1a:</i> Scheduling meetings & training sessions, coordinating volunteer activities, record keeping, budget tracking and report generation for year 1 | Jul-02 | | | |
| | Scheduling meetings & training sessions, coordinating volunteer activities, record keeping, budget tracking | | | | |
| | <i>Task 1b:</i> and report generation for year 2 | Jul-03 | | | |
| Task Product(s): none unless specifically requested | | | | | |
| Success Criteria: Record of meetings/minutes, volunteer list, training list, budget tracking analysis, monthly program status reports | | | | | |
| Task 2: | Establish/Maintain Reference/Monitor Sites: | Jul-03 | | \$20,000.00 | \$20,000.00 |
| | <i>Task 2a:</i> Detailed Planning for reference/monitor site establishment & site selection | Aug-01 | | | |
| | <i>Task 2b:</i> Pre-project training for volunteers and students | Oct-01 | | | |
| | <i>Task 2c:</i> Perform site surveys and set monuments | Dec-01 | | | |
| | <i>Task 2d:</i> Perform re-survey of sites in July 2002 | Jul-02 | | | |
| | <i>Task 2e:</i> Perform re-survey of sites in July of 2003 | Jul-03 | | | |

Task Product(s): Detailed site maps, stream channel and site characteristics data for each location, photographs for each survey performed

Success Criteria: Successful establishment of the reference/monitoring site and the commencement of the monitoring phase

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|---------|--|--------|------------|------------|-------------|
| Task 3: | Site Monitoring | Jul-03 | \$5,000.00 | \$5,000.00 | \$10,000.00 |
| | <i>Task 3a:</i> Generation of monitoring procedures | Oct-01 | | | |
| | <i>Task 3b:</i> Training for community volunteers & students | Oct-01 | | | |
| | <i>Task 3c:</i> Monitoring supervision and data verification | Jul-03 | | | |
| | <i>Task 3d:</i> Data organization, archiving and management | Jul-03 | | | |

Task Product(s): Monitoring procedures, trained volunteers and students, site data, data organized, archived and controlled

Success Criteria: All data collected according to plan and established procedures, data well organized and easily retrievable

| | | | | | |
|---------|---|--------|------------|-------------|-------------|
| Task 4: | Computerize Data (BASIC) | Jul-03 | \$4,000.00 | \$10,000.00 | \$14,000.00 |
| | <i>Task 4a:</i> GPS/GIS training for field survey teams | Oct-01 | | | |
| | <i>Task 4b:</i> Data collection using GPS equipment | Jul-02 | | | |
| | <i>Task 4c:</i> Data Preparation | Jul-02 | | | |
| | <i>Task 4d:</i> Data Presentation | Jul-02 | | | |

Task Product(s): Establishment of a web site, project site data, maps and photographs entered in the web database

Success Criteria: Project data, maps and photographs available to the public on the web site

| | | | | |
|----------|--|--------|-------------|-------------|
| Task 5: | Pilot Project Design and Proposal | Jul-03 | \$10,000.00 | \$10,000.00 |
| Task 5a: | Potential restoration site data evaluation | Jul-02 | | |

Task 5b: Select site for restoration proposal, collect additional data as necessary

Task 5c: Design restoration project

Task 5d: Submit design for peer/agency review

Task 5e: Modify design based on valid peer review comments

Task 5f: Develop resoration proposal & circulate for review

Task Product(s): Restoration project design, restoration proposal

Success Criteria: Acceptance of the project design and proposal as a viable project

| | | | | |
|---------|-----------------------------|--------|------------|------------|
| Task 6: | Reporting and Presentations | Jul-03 | \$2,000.00 | \$2,000.00 |
|---------|-----------------------------|--------|------------|------------|

Task 6a: Quarterly progress reports: Progress reports on project implementation, including financial status, milestones reached, products completed, and general assessment of overall progress, including problems encountered or anticipated.

Task 6b: Draft final report: Draft report summarizing the project implementation, achievements, product deliveries, financial status. To be sent to the Contract Manager for review and comment.

Task 6c: Final report: Revised report incorporating comments from the Contract Manager and others.

Task 6d: Presentations: Delivering at least one final summary presentation to CALFED.

Task Product(s): Quarterly progress reports, final report, final presentation

Success Criteria: Meeting project objectives within budget

CALFED Watershed Program Budget Summary I

| Task Description | Labor | Supplies | Materials | Subcontract* | Match | CALFED | Total |
|---|--------|----------|-----------|--------------|--------|--------|-----------|
| Task 1: Administration | 6,000 | | | | 6,000 | 0 | 6,000.00 |
| Task 2: Establish/Maintain Monitoring Sites | 18,000 | | 2,000 | | | 20,000 | 20,000.00 |
| Task 3: Monitor Sites | 10,000 | | | | 5,000 | 5,000 | 10,000.00 |
| Task 4: Computerize Data | 14,000 | | | | 4,000 | 10,000 | 14,000.00 |
| Task 5: Pilot Project Design & Proposal | 10,000 | | | | | 10,000 | 10,000.00 |
| Task 6: Reporting and presentations | 2,000 | | | | | 2,000 | 2,000 |
| Totals: | 60,000 | | 2,000 | | 15,000 | 47,000 | 62,000.00 |

*Provide a separate itemized budget using this format for subcontracts